ABSTRACT

An artificial cardiac pump, comprising an impeller (3) rotatably supported on a fixed shaft body (2) in a housing (1) and a drive mechanism rotating the impeller, wherein blood is taken in from the front side and force-fed to the rear side by the rotation of the impeller (3). The shaft body (2) is connected between a front side fixed body (5) fixed to a straightening plate (4) joined to the housing (1) at the front of the impeller (3) and a rear side fixed body (7) fixed to a diffuser (6) joined to the housing (1) at the rear of the impeller (3). The impeller (3) further comprises a sleeve (8) having an inner peripheral surface opposed to the outer peripheral surface of the shaft body (2) through a minute clearance and front and rear end faces opposed to the rear end face of the front side fixed body (5) and the front end face of the rear side fixed body (7) through minute clearances, and an impeller (9) joined to the outer peripheral surface of the sleeve (8). The drive mechanism further comprises a polar anisotropical permanent magnet (10) enclosed in the sleeve (8) and a rotating field generator (11) enclosed in the housing (1).